FOOD OUTPUT NEAR CAPACITY

THE AGRICULTURAL SITUATION

OCTOBER 1942

A Brief Summary of Economic Conditions

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IN THIS ISSUE

RECORD-SMASHING HARVESTS and price stabilization were again headline news in October. Problems of labor, storage, transportation and processing are gaining more and more attention, and 1943 production plans are being developed. * * * Yields and production are setting new records with small grains already in, cotton picking passing the peak, peanut harvest nearly over and corn and soybean harvests underway. Spring pigs are moving to market and feeder cattle into the feed lots. Cash income from marketings will be the highest on record. Farmers have worked strenuously, aided by good weather, to produce huge increases in feed and oil crops and animal proteins needed by free men fighting to stay free. They will be hard put in 1943 to exceed or even equal 1942 production. * * * The drive to hold down the cost of living entered its current phase September 7 when President Roosevelt asked Congress for specific authorization to stabilize farm prices at parity or recent levels, whichever is higher. This Congress granted October 2, with the provision that price ceilings should be raised if they did not reflect increases in farm labor and other costs since January 1, 1941.

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Stability for the Farmer

PROTECTION of farmers both now and after the war along with protection of consumers during the war is the keynote of the program to stabilize prices of farm products.

In World War I, the first year of the United States' participation was the most favorable for farmers from the standpoint of the relation between prices paid and prices received, even though prices received by farmers did not reach their peak until May 1920, a year and a half after the Armistice.

Late 1917 or early 1918 would have been the ideal time for a general price freeze—probably February 1918, 10 months after the United States' entry into the war. In that month, the index of prices received by farmers reached 200. It was not that high again until August. No monthly record is available of prices paid by farmers in 1917 or 1918, but the yearly index indicates prices paid by farmers were advancing more rapidly than prices received in 1918. From then until the crash in 1921, the ratio became more and more unfavorable to farmers.

The index of prices received by farmers reached a peak of 244 in May 1920, but the buying power of farm products was less than in 1917. A year later the index of prices received had tumbled to 113. Prices of commodities bought by farmers fell more slowly and not as far.

THE price trend in World War II started along much the same pattern. The buying power of farm products jumped from 71 in August to 78 in September 1939, remained nearly unchanged until December 1940, and then increased from 80 in March to 101 in September 1941. From then on until after the general price-control order became effective, prices paid by farmers increased just as rapidly as the average of prices received.

The experience of the last war indicates that nearly all farmers would gain more by having the prices they pay and the prices they receive stabilized at present levels during the war and as long as necessary afterward, than to have them repeat the losing race from 1918 on to the disastrous plunge in 1921.

Under October 1942 legislation, price ceilings for farm products cannot be set below parity or below the highest market level between January 1 and September 15, 1942, whichever is higher. If such ceilings are too low to reflect increases in farm labor and other costs since January 1, 1941, the President is directed to raise them.

The act calls for loans at 90 percent of parity for cotton, corn, wheat, rice, tobacco, and peanuts, to establish price "floors" for these products. For wheat and corn, however, the President is given discretion to hold the loan rate at 85 percent where this is necessary to prevent increases in prices of feed for livestock and poultry.

In his radio address September 7, President Roosevelt said:

"I think I know the American farmers. I know that they are as wholehearted in their patriotism as any other group. They have suffered from the constant fluctuation of farm prices—occasionally too high, more often too low. Nobody knows better than farmers the disastrous effects of wartime inflationary booms and postwar deflationary panics.

"I have today suggested that the Congress make our agricultural economy more stable. I have recommended that in addition to putting ceilings on all farm products now, we also place a definite floor under those prices for a period beginning now, continuing through the war, and for as long as necessary after the war. In

this way we will be able to avoid the collapse of farm prices which happened after the last war. The farmers must be assured of a fair minimum price during the readjustment period which will follow the excessive world food demands which now prevail.

"WE must have some floor under farm prices, as we have under wages, if we are to avoid the dangers of a post-war inflation on the one hand, or the catastrophe of a crash in farm prices and wages, on the other."

Secretary Wickard commented as follows on the President's message to Congress:

"The President's request for stabilization of wages, prices, and profits will have the approval of an overwhelming majority of the American people, including the farmers.

"In two previous statements, I have said that I thought section 3 of the Price Control Act no longer was needed to protect agriculture. I am sure that it should not be permitted to block the President's efforts to act on the entire economic front.

"I think it extremely significant that the President has in mind stabilization for agriculture in the post-war period. Speaking from experience, I believe that most farmers are getting along fairly well now and that they will go ahead confidently if they feel they will be protected after the war ends.

"I am glad that the President recognizes the importance of agricultural production and stressed the increasing seriousness of the farm-labor situation."

Commodity Reviews

PRODUCTION: 1942

MONTH after month the Crop Reporting Board has raised its estimates of prospective 1942 crop production. Because of continuing favorable weather and high yields, the September report showed another boost. Aggregate crop production was estimated at 14 percent more than last year, and 13 percent ahead of the former all-time peak reached in 1937. And Secretary Wickard said that if the weather is favorable during September, total production may be even larger.

September estimates for major crops were 3,016 million bushels of corn against 2,673 million in 1941, 981 million bushels of wheat against 946 million, and 14 million bales of cotton against 10.7 million. Increases are general this year for all crops. For 1942 as compared to 1941, figures for oats were 1,353 million bushels and 1,176 million, for barley 419 million bushels and 359 million, for rice 72 million bushels and 54 million. The estimated production of 21.6 million bags of dry edible beans was about 3 million bags over the previous record crop last year, and the expected dry field pea production of 7.3 million bags approaches twice that of 1941. Estimates for soybeans for beans have been raised to 211 million bushels, almost twice the 107 million produced in 1941, and for peanuts to 2,930 million pounds compared with 1,475 million last year.

The September report contained an impressive list of crops which have already set or are expected to set new high records for yields per acre. Included were corn, wheat, rye, cotton, hay, beans, peas, potatoes, several vegetables, and quite probably fruits as a group. In addition, near-record yields were indicated for oats, barley, soybeans, sugar beets, and tobacco. Together, these crops occupy 93 percent of the total crop acreage. Favorable weather, improved varieties, and progressive mechanization coupled with better farming, are credited with this year's high yields.

CAPACITY: 1943

Technicians of the Department of Agriculture have been aided by representatives of farmers throughout the Nation in studying potential farm production to meet war needs in 1943. Conclusion is that total farm production this year, aided by favorable weather, has about reached the maximum we can plan for in 1943. But within this total production capacity, we can make shifts to get more of the crops needed most, and less of the crops not as essential to the war. More vegetable oils can be secured by further shift from cotton to peanuts, from feed grains to soybeans, or more beef and pork can be had by shifting from oil crops to feed grains. Selective increases can be made for beef, pork, or dairy products to make most effective use of any given supply of feed.

Selection of crops whose production should be specially encouraged is a difficult matter, however, for war demands are large for almost all farm products. The only commodities in special abundance are wheat, cotton, and tobacco, and even for these, increased production of certain types or qualities is desirable. And to secure total production as large as this year farmers will have to overcome difficult obstacles in shortages of labor, materials, and equipment, and weather will again have to be favorable. Farmers face a big job in war production next year.

LABOR: Harvest

Farm employment figures on September 1 showed almost as many workers on farms this year as last, although harvest ranks were filling up somewhat slower than in 1941. While the total number of workers remains near the average of former years, the composition of the labor group is changing. With hired workers being 28 percent of the 11.4 million workers on farms in September, the number of family workers for this date was the lowest on record. Among the hired workers were many inexperienced men, women, and children.

With harvest operations getting in full swing, farmers were planning full use of every resource at hand, including all available men, women, children, old folks, townspeople, exchange labor, and the efficient use of machinery. The Department of Agriculture is aiding, insofar as funds permit, by moving workers to areas where they are most needed. Importation of 1,500 Mexican laborers to help in the California sugar beet harvest was approved by the War Manpower Commission. So far, little crop loss has been reported as a result of labor shortages, although there are minor losses in some areas and general inconveniences.

Possibility is that labor shortages for moving and processing the crops after they are harvested may result in greater difficulties than scarcity of labor for harvest. Marketing and transportation facilities will be handling the largest farm production of all time, and their labor will be as scarce, perhaps more scarce, than labor hired by farmers. All the way down the line to the consumer, shortages of labor, materials, and equipment must be overcome to complete the production farmers have so well begun.

FARM INCOME: Up

After September reports of larger crops following the August increase in prices, BAE economists revised upward their estimate of cash income for farmers in 1942. Their estimate is now 15 billion dollars; this is about a billion more than was estimated in mid-summer, and a new record high. The previous high was 14.4 billion dollars of cash income in 1919. Gross farm income this year, which includes government payments and values of goods and services supplied by the farm in addition to cash receipts, is expected to exceed 18 billion dollars. Net income to farm operators, which allows for production costs, will be an all-time high of about 9.8 billion dollars.

Index Numbers of Prices Received and Paid by Farmers

Year and month	Prices received	Prices paid, interest and taxes	Buying power of farm products[1]
1941			
January	104	128	81
February	103	128	80
March	103	129	80
April	110	129	85
May	112	130	86
June	118	132	89
July	125	133	94
August	131	136	96
September	139	138	101
October	139	141	99
November	135	143	94
December	143	143	100
1942			
January	149	146	102
February	145	147	99
March	146	150	97
April	150	151	99
May	152	152	100
June	151	152	99
July	154	152	101
August	163	152	107
September	163	152	107

[1] Ratio of prices received to prices paid, interest and taxes.

PRICES: Same

The average of prices received by farmers in mid-September was 163 percent of the 1910–14 base period, the same as a month earlier. As greater numbers of livestock came to market in the fall upturn, declines in meat animal prices offset rises for grains and general crops. Compared to mid-August, prices on September 15 were higher for wheat and other grains, but slightly lower for hogs, cattle, and some livestock products. Prices paid by farmers, including interest and taxes, continued at 152. The ratio of 107 for prices received-paid was the same as on August 15, and the highest since just after the first World War.

FARM MACHINERY: Rationing

Rationing of farm machinery has become a responsibility of the Department of Agriculture. Materials avail-

Prices of Farm Products

[Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and State]

	5-year average August 1909 to July 1914	September average 1909–13	September 1941	August 1942	September 1942	Parity price September 1942
Wheat (bushel) ---- cents	88.4	87.7	95.8	95.4	102.6	134.4
Corn (bushel) ---- do	64.2	69.6	70.8	83.4	82.6	97.6
Oats (bushel) ---- do	39.9	38.8	39.9	42.6	43.3	60.6
Rice (bushel) ---- do	81.3	----	89.1	162.9	154.4	123.6
Cotton (pound) ---- do	12.4	12.2	17.53	18.03	18.59	18.85
Potatoes (bushel) ---- do	69.7	74.4	[1] 63.8	115.4	107.7	[2] 109.2
Hay (ton) ---- dollars	11.87	11.39	7.94	8.89	9.03	18.04
Peanuts (pound) ---- cents	4.8	4.7	4.49	5.99	5.69	7.30
Apples (bushel) ---- dollars	.96	.71	.85	1.16	1.20	1.46
Hogs (hundredweight) ---- do	7.27	[1] 7.51	11.24	14.13	13.57	11.05
Beef cattle (hundredweight) ---- do	5.42	[1] 5.34	9.32	11.30	11.17	8.24
Veal calves (hundredweight) ---- do	6.75	[1] 6.73	11.20	12.91	13.00	10.26
Sheep (hundredweight) ---- do	4.53	[1] 4.25	5.36	5.62	5.55	6.89
Lambs (hundredweight) ---- do	5.88	[1] 5.48	10.09	12.07	11.92	8.94
Butterfat (pound) ---- cents	26.3	25.8	[1] 36.8	40.6	42.9	[3] 39.8
Milk, wholesale (100 pound) ---- dollars	1.60	1.59	[1] 2.42	[1] 2.53	2.62	[3] 2.50
Milk, retail (quart) [4] ---- cents	6.8	6.7	11.0	11.8	11.8	10.3
Chickens (pound) ---- do	11.4	11.6	16.3	19.6	20.3	17.3
Eggs (dozen) ---- do	21.5	20.5	30.3	32.2	34.7	[3] 37.3
Wool (pound) ---- do	18.3	18.6	[1] 36.2	39.4	39.7	27.8
Tobacco:						
Flue-cured types 11–14 ---- do	[5] 22.9	----	2.62	33.7	37.0	27.9
Maryland types 32 ---- do	[6] 22.9	----	32.0	29.5	29.0	22.0

[1] Revised.
[2] Post-war base.
[3] Adjusted for seasonality.
[4] Retailed by farmers directly to consumers.
[5] Base price crop years 1934–39.
[6] Base price crop years 1919–29.

able for manufacture of farm machines and equipment are not sufficient to meet all demands of farmers. Rationing is needed to control distribution of the limited supply to assure its greatest possible contribution toward meeting farm-production goals.

Under the temporary rationing plan which took effect September 17, farmers need certificates to buy beet lifters, beet loaders, combines, corn pickers, disc harrows, feed grinders, fertilizer spreaders, grain drills, grain elevators, hay balers, lime spreaders, manure spreaders, milk coolers, milking machines, pick-up balers, potato diggers, shredders, and tractors (including garden tractors). Certificates to purchase these machines will be issued by county rationing committees, each made up of the chairman of the county AAA Committee and two other farmer members appointed by the County USDA War Board. Appeals can be taken to State USDA War Boards, and the administrator at the national level will be Fred S. Wallace, Special War Board Assistant to the Secretary of Agriculture.

Farmers can obtain purchase-certificates for rationed items only after showing that present equipment is not adequate, that needs cannot be met by purchase of used equipment, rentals or custom work, and that production of needed crops will suffer from failure to obtain the equipment.

MEAT ANIMALS: Autumn

Out-turn of meat is increasing seasonally as hogs from the record large spring pig crop come to market. Slaughter will be larger in the fall months than ever before, probably 25 percent more than last year in the October-December period. Peak of the market movement will come near the end of the year, and farmers are urged to market early or late in order to avoid unnecessary strain on market and processing facilities during the peak period.

Cattle slaughter stepped up in early September and will continue large the rest of the year. Increase over last year is largely in range and short-fed cattle, and marketings of well-finished cattle may run somewhat smaller than in the autumn of 1941. Movement of stockers and feeders to the Midwest, however, indicates that fairly large numbers of cattle will be fed for at least a short period. Economists estimate that reduction of beef supply by shorter feeding will be small, and that use of the feed for hogs and other animals can more than offset the decreased production of this type of meat.

Market supplies of sheep indicate that herds have probably reached a peak and that some liquidation may be under way. Numbers slaughtered last summer were about 10 percent of total sheep and lamb slaughter, compared with a usual percentage of about 5 or 6 percent. The lamb crop was a little smaller this year than last, but BAE expects total supplies of sheep and lambs this fall to be larger than a year earlier.

OILSEEDS: Prices

Commodity Credit Corporation in early September announced a program to aid the processing of vegetable oils, to support prices to farmers, and to preserve price ceilings. Minimum prices at central markets for oilseeds, with allowances for types, grades, location, and time of year, are expected to result in average prices to farmers near $1.55 a bushel for soybeans of oil varieties, over $80 a ton for oil peanuts, $47.50 a ton for cottonseed, and around $2.25 per bushel for flaxseed. Crushers, after paying minimum prices, are assured prices for crude oil and oilmeal equal to the maximum prices for such products already established by OPA. To preserve price ceilings on manufactured products, Commodity Credit Corporation has arranged so that refiners will be able to buy crude soybean, peanut, and cottonseed oil at ½ cent per pound under the minimum price received by crushers.

September estimates were that 4.4 billion pounds of soybean, peanut, cottonseed, and linseed oil could be produced from this year's crops, compared with 2.8 billion pounds produced last year. The next problem is to arrange crushing capacity to handle this enlarged volume. Present prospects are that about 4 billion pounds can be produced from crushings before October 1943. This production, plus about 8 billion pounds of animal fats, will make total supplies of fats and oils near 12 billion pounds—enough to satisfy our needs for 1942–43.

FEED: Estimates

Supplies of feed grains per animal unit were brought to the same level as last year by estimated increases recorded in the September crop report. Although there will probably be 10 percent more animal units on farms in 1942-43 than in 1941-42, the feed grain supply is expected to be 9 million tons more, and more feed wheat will also be available. Supplemented by ample supplies of hay, forage, and high-protein feeds, these grain stocks will permit the greatest feeding program of all time. Meat animals, milk cows, and poultry will be able to produce abundantly on these feed supplies. Although there is uncertainty among feeders regarding margins on livestock and livestock products because of present and potential price ceilings, needs of the Nation assure that means will be found to permit large and efficient utilization of all feed to produce livestock and livestock products.

WHEAT: Records

Record carry-over, record yield, and near-record crop add up to a total wheat supply for 1942–43 over 1.6 billion bushels. Last year the supply of 1.3 billion was a record. Domestic consumption this year, including wheat used as feed, may be 760 million bushels, leaving about 850 million bushels for exports and carry-over. Storage facilities are strained, and agricultural technicians are seeking ways to move this wheat out of storage in country elevators in order to clear the way for handling crops next year. But the large supplies of wheat in the United States are a real bulwark against food and feed shortages during the war.

Recent estimates are that as much as 400 million bushels of this year's crop may go under loan. In mid-September, loan values at most important markets were above market prices, but economists expected the spread to narrow later in the season.

POULTRY: Marketings

October and November may be seasonal high points for the largest farm marketings of young chickens on record. Total supplies will be 20 to 25 percent more this fall than last, and prices are materially higher due to strong demand for meats. Supplies of turkeys will be about the same as last fall, and their prices will also be higher.

Secretary Wickard in mid-September asked poultrymen to increase production of poultry for meat to replace supplies of beef and pork now being diverted to military use and lend-lease. He asked for 200 million additional chickens to be marketed at about 3 pounds each, which can replace much of the estimated 3 billion pound deficit in meat for civilian demands. Fewer months are required to raise poultry to marketable size than for any other important type of meat product.

Egg production continues much higher than last year, with supplies remaining abundant for all consumers and processors. As the seasonal decline occurs, considerable quantities of eggs stored in the high-production period of spring and early summer are being withdrawn for use in drying plants. Egg prices are high and favorable to large production for fresh use through the fall months.

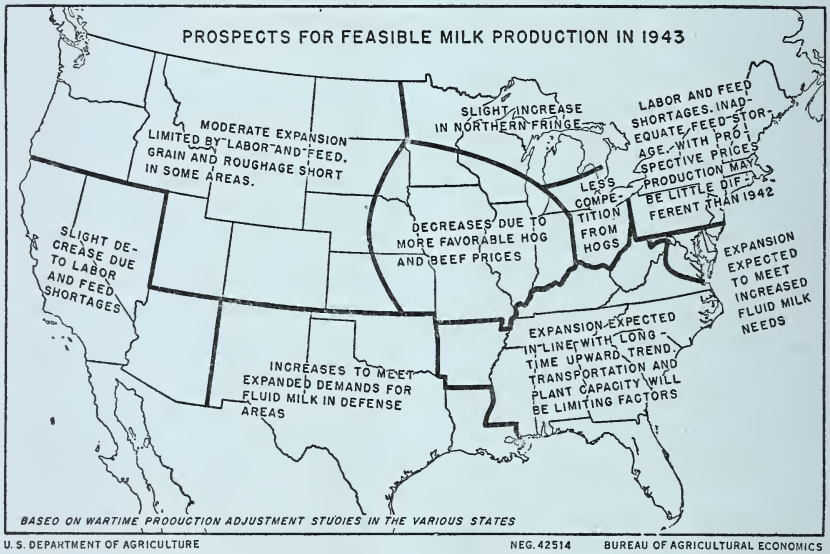
RICE: Supplies

More rice is being produced in the United States than ever before. Marketing was a little late in starting, but in late October was in full swing in both the South and in California. Domestic consumption for 1942–43, including United States and possessions, is estimated at about 43 million bushels. Supply will be about 73 million bushels—almost all of it new-crop rice since the carry-over was negligible. This will leave almost twice as much rice as last season for export and carry-over. Prices to farmers have been near the highest levels possible under the maximum prices established for milled rice at base points. Prospects are for a good price for the entire crop, well above Government price-support assured by loans at 90 percent of parity.

FRUITS: Processed

Carry-over of canned and dried fruits into the 1942–43 season was the smallest in recent years. Fruit crops are large this season, however, and near-record packs will be made which are expected to meet most demands. Prices of processed fruits are expected to average 20 to 25 percent more than in 1941–42.

The September estimate of the commercial apple crop was 126.1 million bushels, 4 million more than last year. Increased demand for apples and apple products will easily absorb the larger crop. Fixed prices have been established for dried apples at 19 cents per pound on the Pacific Coast and 2 cents higher in the Eastern States, packed in 25-pound or 50-pound wood boxes.



About 120 billion pounds of milk will be produced in 1942. Prospects are that in 1943 a little more milk will be produced, but the increase is not expected to add much more than 2 billion pounds to this year's production. More cows will be on farms, but it will be difficult to equal this year's production per cow. In areas where defense industries are concentrated, lack of skilled labor, plus favorable opportunities to use available feed for meat animals, will be the principal factors limiting maintenance or expansion of production.

MILK: Products

Most of the 4 billion more pounds of milk being produced in 1942 over 1941, is being used for greater manufacture of dairy products. Production of dried skim milk, evaporated milk, and American cheese has been stimulated by price supports and Government purchases to meet the needs of our fighting forces and allies. Stocks of these products are an important resource of this Nation in fighting the war, filling urgent needs abroad as well as helping to maintain the supply of protein foods at home. In addition, increased incomes and better diets in the United States are demanding more fluid milk and cream, ice cream, and butter. These latter products will not be in much more abundant supply this year than last. The increased demand for butter is reflected mainly in higher price. Greatest encouragement just now is being given to production of dried milk and butter, and cheese, rather than to evaporated milk as was done earlier in the year.

POTATOES: Supply

September estimates of potato production at 378 million bushels relieve fears of a serious shortage. Acreage this year was little changed from last, but record yields of last year are being exceeded to produce a crop sufficient for our expected needs. Prospects are that in spite of the larger production, prices will remain higher than last season.

—C. A. Boonstra.

AGRICULTURAL PRODUCTION IN 1943

Farmers in 1942, through a combination of hard work and favorable weather, are surpassing their high goals for wartime production. Now that crops for 1942 have been largely produced and harvested, technicians of the Department of Agriculture are considering production needs and possibilities for 1943. Their data, collected during the summer months, are being combined in production plans for next year.

The accompanying articles are short summaries of detailed studies prepared in the Department of Agriculture, primarily for administrative use. The authors, whose task has been that of bringing together some of the highlights, feel that credit should be given to the hundreds of workers who took part in the surveys.—Ed.

WE KNOW that we will need in 1943 all the meat, dairy, poultry, wool, hides, and byproducts that American farms can produce. We know, too, that we will need even more than this year's record production of vegetable oils to meet demands of war industry and shipments of food abroad. We know that rising incomes and war demands will require sustained large production of all foods including fresh vegetables for consumption and processing, dry beans and dry peas and potatoes, sugar and rice.

There is already more than enough wheat for food use, and next year's crop could be relatively small without hindering in any way the fighting efficiency of the Nation. But for the principal feed grains—corn, oats, barley, grain sorghums—the fact that this year's heavy feeding of livestock will cut into the reserves of the Ever-Normal Granary makes it desirable that feed-grain production in 1943 be at least large enough to avoid further depletion of reserves. At the same time, pasture and forage crops need to be maintained at a relatively high level. Present rates of consumption for cotton and tobacco indicate that

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over-all production is fairly satisfactory although more long-staple cotton will be needed.

FARMERS generally know the importance of maintaining high rates of production in order to meet these wartime requirements, but they also recognize many "tight spots" created by our Nation-wide mobilization of resources. In the past, farmers have been able to maintain or increase production easily by planting more acres, making greater use of machinery, fertilizers, labor, and other materials. But the war will prevent use of these easier methods in 1943. Farmers are now asked to do more with less because rubber and many insecticide materials came from territory now in enemy hands; steel is needed in all phases of munitions production; nitrates are basic to gunpowder; our armed forces and war industries must have more manpower; and transportation is heavily burdened and handicapped by gas and rubber shortages.

Labor shortages are the most threatening of the 1943 obstacles to increased production. There will be a lack of experienced year-round hands, especially of those who are familiar with farm machinery, and also a lack of seasonal workers with specialized skills. Milkers, tractor drivers, sheep herders, lambers, shearers, woodsmen, mill hands, and cow hands are going to be scarce. Already the lengthening of the work day, the increasing dependence upon young, older, and inexperienced workers, and the marked increase in wage rates, indicate that the supply of experienced farm hands is being exhausted. In 1943 all community labor resources will be needed, and national programs will have to be stepped up to assure a definite supply of labor where it is most needed.

The labor situation will greatly increase the need for machinery in farming. But fewer new machines will be available to farmers than in 1942, since metals are among the most critical of all war supplies. Only the most pressing demands will be met. Difficulties in obtaining replacement parts and tires may seriously hinder farm production. In addition, supplies of some fertilizers and insecticides, and of materials for farm construction, will be scarce in all parts of the country.

ASIDE from the physical problems of production, there are difficulties in sight for marketing products once they are grown. Transportation, storage, and processing facilities, all will be more affected by shortages in 1943 than in 1942. Then, too, there is the problem of adjusting prices among various products to encourage desired changes in the wartime farm plant. Along with this are the ever-present problems of tenure relationships and booming land values.

The need for overcoming these obstacles is clear, for we know that the United Nations could use even more farm products than are represented in the record crops and livestock production of 1942. It is evident that agriculture has a job of war production that matches the efforts of armed men and industrial workers engaged in this total war. Farmers know this and are grimly determined to do their job and do it well.

With all the demands on production, increases in vital war crops for 1943 must result from shifts of production capacity from less needed crops, or from increases in some areas of the Great Plains and South where additional cropland is available. To aid farmers in making these shifts, technicians of the Department of Agriculture have been developing estimates giving the possibilities for expansion, or contraction, of production throughout the country. Such estimates are necessary in the distribution among farms of the production jobs in 1943. They are also interesting as a picture of what production changes are possible in 1943.

IN general, these estimates are totals of what the Nation's 6 million farmers are likely to produce in 1943 in view of present expectations concerning prices, agricultural programs, manpower limitations, marketing outlets, and supplies of seed, feed, fertilizer, and other materials of production. These totals were built from the ground up by determining what would be the most reasonable reaction of farmers on the many different types of farms throughout the country. An interesting sidelight was an estimate of reserve capacities for the more important war commodities such as meat, milk, and vegetable oils. All estimates assumed normal weather conditions and average yields, factors which by themselves call for considerable increases in acreages in order to get crops as large as in 1942, since 1942 growing conditions were unusually favorable.[1]

Production in 1943, based on these assumptions, is estimated at roughly the same as that now estimated for 1942. Within this total capacity, fortunately, there are reserves for critical commodities. For example, in the South more peanuts could be produced if less cotton were grown, or in the Corn Belt more pork could be produced at the expense of milk or soybeans. But the total agricultural plant can be increased only slightly in 1943 over 1942. Combined estimates for 1943 add 7 million acres to the 1942 figure of 340 million acres in intertilled crops, small grains, and hay crops. More than half of this increase could be in intertilled crops whose production per acre would be greater than the average of all cropland. However, this added cropland is scarcely enough to offset the lower yields which must be assumed for next year. To realize the same total output in 1943 will require more widespread use of efficient farming practices, substitution of more for less intensive crops, careful planting of crops on land best suited for their production, favorable weather, and vigorous programs to help farmers get labor, equipment, and materials.

GETTING down to specific farm products, it is estimated that compared with 1942 twelve percent more hogs could be produced in 1943. This estimate forecasts more hogs on farms and a combined spring and fall pig crop in 1943 about 7 million head over this year's estimated 105 million. Beef cattle numbers, however, are leveling off from the steady increase of the past several years. In the Corn Belt, cattle numbers and production will remain about the same as in 1942 because of increased acreages of corn and soybeans, and decreased acreages of hay and pasture. Nevertheless, because of increases in other areas and a greater slaughter of dairy cattle and calves, total slaughter of cattle and calves in 1943 may be somewhat above that of 1942.

With more milk cows on farms next year, a 3.5 percent increase in milk production over 1942 seems possible. This increase appears to be a maximum and it is threatened by poorer prospects for feed-milk price relationships and inadequate labor supplies. For eggs, estimated production next year is about 6 percent over the more than 4 billion dozen produced in 1942, since substantially greater numbers of layers will be on farms. Wool production in 1943 will be about the same as in 1942, but mutton and lamb will be in slightly greater supply.

Naturally, the maintenance of record-breaking production of livestock and livestock products will place a tremendous burden on feed production. Although corn acreage next year could be as much as 10 percent over 1942 in some areas, for the country as a whole the estimated increase is only about 1 percent. Other small grains—oats and barley—will be in competition with soybeans and corn

[1] For a more complete explanation of these estimates, see Agriculture's Wartime Production Capacity, BAE processed publication, August 1942.

and fewer acres may be planted next year than in 1942. Spring varieties especially will lose out as soybeans, corn, flax, and cotton increase their competition for land. Hay and forage crops are expected to approach those grown this year.

The total feed-grain situation will be eased somewhat by the large crops of 1942. increases in feeding of loan wheat, and greater seeding of acreage to wheat-rye or wheat-barley mixtures to be used directly for feed. The 1943 wheat crop itself, however, will almost certainly be considerably less than this year's bumper production, largely because of lower yields and general acreage reductions. Rice, another important food grain, was planted this year on most of its available acreage

AMONG the vegetable oils, increases in 1942 production were notable for soybeans, peanuts, cottonseed, and flaxseed. Studies indicate that it is possible to expand their acreage further in 1943. The South has more than 10 million acres of suitable peanut land, of which nearly 5 million were planted to peanuts this year. Considering the advisability of using much of this land for other needed crops and maintaining rotations, any large increase over the 5 million acres planted this year would require an extremely intensive program to get peanuts in preference to competing crops. More soybeans could be grown next year, but increases in this oil crop would come largely at the expense of feed crops and livestock. Slight increases also are possible for flaxseed acreage, although not sufficient to assure higher production than that resulting from extremely favorable yields in 1942.

Cottonseed production rests largely on decisions made in regard to cotton lint production for 1943. More long-staple upland varieties are definitely needed and 1943 acreage possibilities for these types are estimated at about 200,000 acres more than the 1.6 million this year. American-Egyptian cotton was increased nearly to its maximum acreage in 1942.

Possibilities for other crops are not greatly different from the 1942 pattern of production. In total, they add up to a feasible total production in 1943 of approximately the level of 1942, but the feasibility can become a reality only by a concerted effort to make the most effective use of our war-limited resources.

—H. R. Tolley.

Northern Dairy Region

AGRICULTURAL commodities needed most in 1943 will include several items that are the principal sources of agricultural income in the Northern Dairy Region (Lake States and Northeast). Needs will be as great or greater next year for virtually all types of crops or livestock produced in this region.

This situation indicates that no great change in the pattern of agriculture is likely here, as it is in some regions where new crops are being produced for the first time; and the predominance of livestock production makes it relatively difficult to make rapid shifts between present enterprises. It also means that the extent to which the production of any one product can be increased by shifting resources from some nonwar enterprise is narrowly limited.

The significance of restricted supplies of productive resources—such as labor, machinery, fertilizer, building materials, and transportation facilities—is becoming increasingly important. Where supplies are limited even quite favorable feed-product ratios will not further increase production. The major industrial area of the Nation is in or near the Northern Dairy Region, which makes the securing of sufficient farm labor especially

difficult. Restrictions on the construction of new processing equipment will limit outlets for products such as milk and sugar beets in some areas.

ALLOWING for these influences, production for 1943 can be only moderately above that achieved this year. In fact, the unlikelihood of as favorable weather next year as this indicates that even with some acreage expansion, the production of certain crops may not be as large.

Milk production over the entire region in 1943 may just exceed the record output in 1942, an increase in the Northeast offsetting a small decline in the Lake States. The number of milk cows is expected to increase, but milk production per cow may decline in view of reduced feed supplies within the region and the relative profitability of using larger quantities of feed for hog production in the principal feed-producing areas. Supplies of fertilizer for pasture maintenance will be restricted in 1943, and shortages of labor will be of paramount importance in many localities.

Heavier grain feeding will be necessary if milk production is to be increased, and special feed programs may be needed to make feed available at relatively low prices, particularly for dairymen who are increasing production. For the country as a whole, it has been estimated that the feeding of 1.5 million tons of soybean oil meal and feed wheat would expand production in the coming year by nearly 3 percent. Roughage supplies appear adequate to supplement the additional grain feeding needed for a similar percentage rise in the Northern Dairy Region.

Further increases in production could be expected if shortages of supplies make it necessary to relax restrictions enough to encourage the entry of new producers into certain markets. Within market areas, it is possible that a modification of base-rating or similar plans might encourage production increases where present penalties or other charges for above-base production raise marginal costs above returns.

PRODUCTION of eggs probably can be increased by about 6 percent in the Lake States and 3 percent in the Northeast. Returns from poultry are now relatively favorable throughout much of the Region, and a large part of the increase in production is likely in areas where supplementary farm flocks are important and where the extra labor needed can be supplied by the farm family. To a considerable degree the demand in Northeastern markets is for eggs for fresh consumption, whereas in the Lake States a considerable part of the increases in production will be sold to egg-drying plants. Several plants designed to produce dry skim milk are now being used to dry eggs. Primarily because of the proximity of lower priced feed and egg-drying plants in the Lake States, it seems desirable that additional eggs for drying should be produced there rather than in the Northeast. The production of chicken meat in the Lake States in 1943 could possibly exceed 1942 output by 5 percent, or by about the same percentage as the increase in eggs. In the Northeast, the number of commercial broilers raised in 1943 is likely to be about the same as in 1942 unless special programs are introduced to increase production.

Production of meat animals—hogs, cattle, calves, sheep, and lambs—could be increased about 4 percent in the Northeast and maintained at the 1942 level or slightly higher in the Lake States. Expansion of meat production in the Northeast will be limited by increases in dairy production, while larger supplies of feed would be needed in the Lake States before output could be materially stepped up. Most of the possible increase in the Northeast would be in hog production, whereas any increase in the production of hogs in the corn area of the Lake States will just about equal reductions further North. Sheep and lamb pro-

duction could be increased about 5 percent in each of the two areas. Less rigorous culling of dairy cows, and possible lighter feeding of beef cattle in view of price ceilings may result in a production of cattle and calves in 1943 no higher than that in 1942.

ACREAGE of feed grains—corn, oats, and barley—promises to be about the same in 1943 as in 1942. With average yields production in 1943 would be approximately 15 percent below that of this year, the decline in the Lake States being about 18 percent and that in the Northeast about 5 percent. Similarly a slightly expanded hay acreage in 1943, as seems possible, may yield a total tonnage below that of this year. The trend toward a larger percentage of all hay land in alfalfa is likely to continue during the coming year.

The production of oil crops could be expanded moderately without great difficulty in 1943 and the acreage may exceed that in 1942 by 3 to 4 percent. In a considerable portion of the Northern Dairy Region the climate and soil are such that soybeans do not yield well. In the southern part of the Region soybeans may displace some acreage previously devoted to tobacco and other crops with high labor requirements. In other areas moderate shifts from small grains to soybeans could be undertaken, particularly if machinery for harvesting is obtainable. Increases in the acreage of flax may be quite closely limited by the more favorable returns from other enterprises in some areas, by a scarcity of clean land and by inexperience in growing flax.

There are definite possibilities of expanding the acreage of potatoes and truck crops by from 1 to 4 percent, although such intensively produced crops will be most seriously affected by labor and fertilizer shortages. Reduction in the quantity of fertilizer available in 1943 indicates a need for acreage expansion if production is to be maintained. However, it is quite possible that in some of the specialized potato areas of the Northeast, the use of 30 percent less nitrogenous fertilizer would reduce yields not more than 5 percent. Quite possibly an increase in the acreage of such staple truck crops as peas and tomatoes could be achieved by reducing the acreage of certain specialty vegetable items, although such shifts should first be examined from the standpoint of canning capacity available in the area.

INCREASES of from 5 to 8 percent in the acreage of sugar beets and dry beans seem possible, as does a doubling of the land in dry peas, although these products also are ones requiring considerable labor and fertilizer. Lack of processing facilities for sugar beets is a principal factor limiting expansion in some areas of the Lake States.

Most of the possible increases in 1943 fit in fairly well with what might be considered a well-balanced agriculture after the war. Perhaps it will be found desirable in the post-war period to feed less intensively, to reduce the war-expanded acreage of some crops, such as soybeans for oil and sugar beets, and to adhere more closely to erosion-control practices. However, as the war progresses it becomes increasingly clear that certain agricultural adjustments are "musts" of the war period, even though they may contribute to agricultural unbalance after the war.

—W. F. Finner.

COTTON: Yield

An all-time record yield of cotton is expected this year, well in excess of the 1937 record of 270 pounds of lint per acre. Total production estimated in the September crop report was 14,028,000 bales, somewhat more than expected total disappearance in the 1942–43 marketing year. Early reports indicate that a greater than average percentage of the crop is of low grade this year, largely as a result of unfavorable weather.

The Corn Belt

FARMERS in the Corn Belt as elsewhere, are planning to grow more acres of feed crops, to farrow more pigs, market more cattle, gather more eggs, and deliver as much or more milk in 1943—because they know that food will win the war. But the job is going to be difficult; immensely more difficult than it was in 1942.

Hog producers in the Corn Belt are raising this year the largest pig crop on record. Production is up in all States, although the recovery in the western Corn Belt since 1936 has lagged behind the recovery in the eastern Corn Belt.

Farmers plan to farrow 8 to 10 percent more pigs next spring than they did last spring. They also hope to market them at heavier weights. The high price of hogs and the favorable corn-hog price ratio makes hog feeding the most profitable outlet for feed grains. Moreover, a little additional labor and equipment would permit greater increases in hog production than in any other class of livestock.

MILK production in the Corn Belt is estimated to have increased 4 percent in 1942 over 1941, as compared to a goal of 6 percent. The number of dairy cows is also estimated to have increased almost 4 percent. Hence, practically all the increase in milk production is accounted for by the increase in cow numbers—not by increased production per cow. Production in Iowa probably will not increase this year. In Illinois, the increase will not exceed 3 percent. The increases in Ohio, Indiana, and Missouri will range from 5 to 7 percent.

Dairying in the Corn Belt is quite sensitive to changes in the prices of dairy and other livestock products. In large parts of the region, farmers shift readily from milking cows to raising calves and to feeding hogs instead of dairy cows. The break in dairy prices in February 1942 caused many farmers to doubt the need for high production of dairy products. But price supports announced for butter in March and July, and for cheese, dried milk and evaporated milk in July, have provided more incentive for increased milk production.

Looking ahead to 1943, dairy farmers are not planning for any substantial increase over the high production of 1942. Better than usual growing conditions for pasture and hay during 1940 and 1941 resulted in relatively high production per cow. The weather can not be expected to remain quite so favorable for pasture and hay in 1943. Heavier grain feeding probably will be needed, therefore, to maintain production at present levels. But feed fed to hogs under present price ratios brings better returns, and many farmers who have the choice to make will feed their grain to hogs rather than to dairy cows. Moreover, the shortage of farm workers presses more heavily upon dairying than upon the production of meat animals.

BEEF-cattle numbers in the Corn Belt, where about 40 percent of the Nation's beef is produced, have been at a high level in recent years and will remain at about the same level in 1943. Increased hay and pasture acreage as a part of the soil conservation program has influenced the increase in cattle numbers in the last decade. But in the last 2 years, competition from corn and soybeans has considerably reduced the acreage of hay and pasture. The area of these crops in the Corn Belt was reduced more than 5 million acres in 1942 as compared to 1941.

Cattle feeders in the Corn Belt will attempt to obtain the maximum output of beef with the kinds of feeds that will not have a higher use value for feeding to other classes of livestock. They recognize that the place of beef cattle in a wartime livestock feeding program is that of consuming forage for which there is no alternative use, together with sufficient grain

and high-protein feeds to produce a reasonable degree of finish. Beyond this point it seems to be better to feed grain to hogs and milk cows rather than to beef cattle. Production of long-fed, highly finished cattle is a wasteful use of feed from the standpoint of obtaining the maximum output of beef. Moreover, medium and good grades of cattle yield the kind of beef bought for the armed forces and by the majority of civilians.

In order to meet next year's need for beef, cattle feeding probably will be continued at a high level. But considerable adjustment in cattle feeding operations will be made to conserve feed grains and to adjust to ceiling prices on beef. Feeding of a large number of cattle—even larger than in recent years—to a reasonable degree of finish is needed, both because of the need for adding weight to as many cattle as practicable before they are slaughtered and because it gives a better distribution of slaughter throughout the year.

The feeder who has good hay and pasture, and perhaps silage, can help meet wartime needs for meat by using these feeds, together with a light ration of corn and high-protein feeds during most of the feeding period, for fattening cattle in poor condition for immediate slaughter. For the last 30 to 60 days, the ration can be increased to a full feed of grain.

EGG production is estimated to have increased this year about 15 percent over last year in the Corn Belt. The increases will be largest in Iowa and Missouri and smallest in Ohio.

Because of the considerable expansion that has occurred in the last 2 years, farmers have indicated that about a 5-percent increase is all that would be feasible next year. Past expansion has been obtained chiefly by increasing the number of hens kept. Further expansion may have to be obtained by higher production per hen through better feeding and management. Laying houses will be filled to capacity this winter and facilities for brooding chicks next spring will be inadequate. These conditions will increase disease and mortality, and generally lower rates of production. Family labor has supplied most of the increased labor required by expanded farm flocks, but further expansion will be limited by other demands for labor.

A SHORTAGE of feed grains for feeding the increased numbers of livestock, although less critical now than seemed likely before the September crop report, remains a definitely limiting factor in a sustained high level of livestock production. Larger than present acreages of feed grains and continuance of the record yields of recent years, or feeding of larger quantities of wheat, will be necessary for continuing 1943 or higher levels of livestock production in 1944 and the years immediately following.

The need for more feeds was reflected in larger acreages of corn, oats, and barley this year than last. The increase in the acreage of corn ranged from 3 to 14 percent, with larger increases in the western part of the Corn Belt than in the eastern part. The combined acreage of these crops will be increased again next year, with most of the increase coming in corn. A somewhat larger percentage increase in 1943 than occurred in 1942 appears feasible.

Although some land in hay and pasture has been and more will be turned over to other uses, the decrease in acreage is not likely to cause any serious shortage in forage feeds. The acreages of these crops were higher in 1939 and 1940 than formerly. The quality was better because larger proportions of the pastures and hay were alfalfa and clover, and the numbers of hay-consuming animals had not been increased proportionately. As already indicated, the numbers of hay-consuming livestock probably will not be increased much, if any, next year

so that the need for hay and pasture will not be increased. But insofar as possible, higher yielding and more nutritious hays and pastures should be grown on the reduced acreage available for these crops as a means of increasing the production of milk and of beef cattle.

SOYBEAN acreage for beans in 1942 was 167 percent of that in 1941 in the Corn Belt. An increase occurred in all States, ranging from 46 percent in Illinois to 144 percent in Missouri. Although the percentage increase was least in Illinois, the total increase in acreage was greater there than in any other State, as Illinois is the leading State in the production of soybeans.

The expansion of soybean acreage probably has reached if not overrun its limits in the eastern Corn Belt. Pressure for feed grains, hay and pasture to maintain increased livestock production will cause a leveling off or some decline in that area. In the northwestern part of the Corn Belt, however, some opportunity still exists for further expansion by substituting soybeans for oats. This substitution can occur without interfering with the seeding of usual acreages of legumes and grasses with oats as a nurse crop.

Flaxseed production in the Corn Belt is centered almost entirely in western Minnesota and in northwestern Iowa. The acreage in Iowa decreased slightly this year and it seems unlikely that any increase will occur next year. The greatest obstacle to the rapidly increasing production of flaxseed in areas where it can compete with other crops is the lack of weed-free, fertile land on which to plant the crop.

MAXIMUM production in the Corn Belt, wherever it is not reached this year, will be approached very closely next year. The production of crops which require local processing, such as the canning crops and sugar beets generally will be about as large this year as can be handled by local processing plants. The proportion of cropland used for intertilled crops probably cannot be increased much beyond that already planned for next year. Livestock production next year will be about as high as available feed supplies will permit in 1944 and years immediately following.

It will become increasingly important, therefore, that every possible effort be made to obtain the most effective utilization of cropland by allocating its use to the combination of crops that will yield the highest production of feed or food and of available feed supplies by allocating them to the classes of livestock and systems of management that convert feed most efficiently into food products, insofar as such allocations are consistent with the food-for-freedom program as a whole. Every possible effort also should be made to avoid a reduction in production efficiency resulting from insufficient care, overcrowding, and diseases or parasites.

—C. W. CRICKMAN.

The West

THE WEST is one of the few regions where production of many important commodities can be increased in 1943 without doing so at the expense of other commodities only slightly less important.

Extensive, highly mechanized farming contributed much to the ability of western farmers to increase their production in 1942 despite many obstacles. This system of farming will help western farmers expand their production still further in 1943 despite probable intensification of shortages of labor, machinery and marketing facilities.

Flaxseed is the outstanding oil crop in the West. In response to war

demands for oil, western farmers seeded in 1942 the largest acreage of flaxseed on record. With the high yields which have accompanied generally favorable growing conditions, a record production is assured. About 160,000 additional acres can be seeded for the 1943 flaxseed crop without displacing other vital commodities. Much of this increase would be in the winter flax areas where the 1942 program was announced too late to affect 1942 seedings, and in the newer flax areas of northern Oklahoma where flaxseed production has been profitable. Production from such an acreage will not equal that of 1942, however, without exceptional yields. Flaxseed is a hazardous crop in the major flax States but its labor requirements are low and the equipment used is the same as that used in the production of small grains. If the demand for oil is sufficient to warrant a substantial displacement of small feed grains, the acreage of flaxseed could be increased another 45 percent.

WHEAT acreage would not be affected significantly by an expansion in flax. Wheat is considered to be a safer and more profitable crop. It is the strongest competitor for productive resources throughout much of the major western wheat areas. Wheat seedings for the 1942 crop were abnormally low in the eastern portion of the Great Plains because of unfavorable seeding conditions, but, for the most part, acreages were controlled largely by allotments. Despite reduced seedings, record yields produced the second largest crop in history, which, together with a record carry-over of wheat and other grains, has created an acute storage problem.

Despite the record supplies of wheat in sight, reductions in acreage should be limited primarily to those areas where such a reduction would permit increases in war commodities. In many of the drier wheat areas, particularly in the western portion of the Northern Great Plains and in the Pacific Northwest, wheat produces more feed per acre and per man-hour than does any other crop. Since other alternatives are limited, the production of wheat for feeding livestock appears to be the greatest contribution to the war effort such areas can make. At current prices, wheat can be fed profitably.

DRY edible peas and beans, sugar beets and canning crops are specialty war crops for which the West is establishing new production records. Labor requirements for dry peas and beans are relatively low, and slightly greater acreages probably will be planted in 1943. Much of the increase in bean acreages in the West would be in Colorado and New Mexico while that of peas would be in the Palouse area of Idaho.

No goals were established for sugar beets, but encouraged by war demands, favorable adjustments of programs and good prices, western farmers expanded their beet acreage 34 percent in 1942. A late spring and a shortage of labor for timely thinning affected yields moderately in some sections but, here again, favorable growing conditions have assured high yields. Although processing facilities are adequate in most sections for a further expansion in beets, the acreage planted in 1943 will reflect the supply and cost of labor during the 1942 harvest. If the labor situation develops this fall about as was forecast in July, some beet acreage will be displaced by less intensive crops in Colorado, Idaho, and Washington. Other western States will maintain their 1942 acreage or increase it moderately, the net change in the West being an increase of about 1 percent. The labor agreement with Mexico may ease anticipated beet labor shortages unless farmers are unwilling or unable to meet the necessary requirements to obtain it. The minimum price for Mexican beet labor in northern California is 65 cents an hour.

The acreage of both tomatoes and peas for processing was increased about

one-third in the western States in 1942. In most sections the 1942 production of these crops approximates the capacity of available processing facilities. The capacity of these facilities could be increased by operating on a 24-hour basis and by spreading the harvest season. However, adequate labor both for producing and for processing a greatly expanded acreage of these intensive crops is not expected to be available. Present indications are that the acreage of tomatoes for processing will be increased only about 1 percent and that of peas for processing about 4 percent in 1943.

AS CONTRASTED with some of the other livestock-producing areas, feed supplies in the West are generally adequate. With the exception of local defense areas, any shortage of harvested feeds, particularly grains, which may limit the production of livestock and livestock products will be confined largely to normal deficit areas such as those on the West Coast. They will result primarily from transportation difficulties rather than actual feed shortages. Range forage may be limited in local sections which are overstocked but, in general, the range is exceptionally good and range livestock will go into the winter in unusualy good condition.

The acreage of feed grains in the West was increased about 11 percent in 1942. It was slightly below the goals but exceptional yields more than offset any likely deficit. In the Great Plains States, for example, the production of feed grains in 1942 will be more than one-third greater than the quantity which will be fed to livestock during the next 12 months. Another 3- or 4-percent increase in 1943 will bring feed-grain acreages in the West well above 1942 goals. Any likely shortage of feed grains which might result from low yields in 1943 could be offset by feeding more wheat.

The supply of hay also is expected to be adequate generally, although less so than that of grains. The acreage of tame hays in the West was increased only 50 thousand acres in 1942, a 300-thousand-acre increase in alfalfa being largely offset by a decrease in other tame hays. Good yields, together with a large carry-over generally, are expected to provide sufficient hay unless an unusually long feeding period is required this winter. Hay shortages may necessitate the feeding of larger quantities of concentrates and byproducts from war crops in some sections of the Intermountain States where stocks of hay were depleted by an extended feeding period last spring, and on the Pacific Coast where livestock numbers are at record levels and importations of hay may be limited because of transportation difficulties. A 5-percent increase in 1943 will bring hay acreages in the West well above 1942 goals. With a leveling off of livestock numbers, hay supplies in 1943–44 will be adequate generally if favorable growing conditions prevail in 1943.

THE livestock industry in the West is in an excellent position to produce huge quantities of meats and other livestock products. Favorable prices, together with several seasons of above-normal precipitation, stock water, and feed supplies, have led to a general optimistic outlook by western stockmen. Cattle and sheep numbers have been increased to record levels. The 17 western States, whose production represents nearly one-half of the national total for beef and veal and three-fourths of that for lamb and mutton, are expected to exceed both their cattle and sheep goals in 1942.

An increased and continuing demand for meats which will make it imperative that their production be sustained at a maximum level will necessitate some adjustments in the West. Some sections are stocked beyond the point of greatest production even with current favorable conditions. Should precipitation return to or fall below normal, the loss in production

would be increased considerably and the range would likely be damaged. A reduction in numbers in such sections would increase the current supply of meat and it would assure sustained production at a high level. Removal of stock from the range as soon as maximum weights have been attained would increase production and conserve range forage in many sections. In other sections increased feeding of concentrates and of byproducts from such war crops as dry peas and sugar beets will be necessary if livestock production is to be sustained at a maximum level.

Some adjustment, particularly in sheep operations, will be necessary also because of labor and transportation difficulties. Sheep operations are affected more than cattle by shortages of skilled and semi-skilled labor. This has been reflected somewhat already by the abnormally large movement of sheep from the range during August. It will contribute to a 1-percent decline in sheep numbers by 1943 as compared with a 1-percent increase in cattle numbers. Despite moderate changes in numbers, production of lamb and mutton can be maintained at about the 1942 level and that of beef and veal can be increased somewhat in 1943 if favorable growing conditions prevail.

While not at record levels, hog production in the West will be increased by more than one-third in 1942. It can be increased at least another one-fourth in 1943. More than one-half of the increase in 1942 and more than two-thirds of that which appears likely in 1943 is in the two Great Plains hog States, Nebraska and Kansas. An even greater increase could be made in the other States. Hog production requires relatively little labor and equipment and it is an enterprise which can be grown into rather quickly. With the current need for pork and lard, and with the surplus of wheat which can be fed profitably to 14-cent hogs, perhaps an even greater increase in hog production should be made in those areas where range resources are limited but wheat or other grains are available.

—H. L. Stewart.

The South

VITAL crops grown in the South which could be increased substantially in 1943 include peanuts, soybeans, and long-staple cotton. Production increases in pork, eggs, and milk also seem possible. Net increases in total crop acreages will be brought about mainly by increasing double-cropping and by greater utilization of idle cropland. Livestock production increases will result principally from better care and feeding, fuller utilization of available feed and pasture, and the use of larger quantities of purchased feed.

Few agricultural changes ever made in a single year are comparable to the 1942 expansion in peanuts. Farmers probably are digging about 4 million acres—a little more than twice the acreage harvested for edible nuts and oil in 1941. In addition, acreage of peanuts grazed by hogs (also a valuable fat source) may be more than 15 percent above last year—a record high. Increased plantings this past spring were made chiefly by "taking up the slack" in the prevailing farming systems. About one-half the added acreage was in areas where peanuts in past years had been grown only on a small scale.

MUCH of the easy substitution of peanuts for other crops in suitable areas has been made already, but increases to about 5 million acres of peanuts for nuts and oil in 1943 would appear possible if labor, machinery and price conditions favor such increases. Much of the increased acreage would

be located in newer producing areas, coming mainly from land now in feed crops or idle. In the Southeast, production would be restricted largely to the Coastal Plains with some expansion on the lighter soils of the lower Piedmont. In the Southwest, the largest expansions are likely in the Sandy Land areas of east Texas, southern Arkansas, northeastern Louisiana, and in the Low Rolling Plains section of Oklahoma.

In most of the older areas, shifts to peanuts have already reduced feed crops nearly to a minimum. A moderate increase in nuts for oil appears obtainable in most of the established peanut areas in the Southeast where peanuts have been used mainly for hog grazing in the past, but that is dependent on changes in the relative prices of hogs and peanuts for oil and the success of farmers in producing peanuts this year. Increased acreage of peanuts in 1943 will add to the already high labor peaks in the South and shortage of harvesting labor is likely to represent a real obstacle in 1943.

An "all-out" campaign in 1943 to get peanuts regardless of the effect on other crops might more than double this year's acreage, or reach a potential capacity of 10 million acres. If this reserve capacity were utilized, peanuts for oil would displace a considerable acreage of short-staple cotton.

THE 1942 acreage of soybeans for beans in the Southern States was about 3 times that in 1941. Most of this increase occurred in the Delta areas of Mississippi, Arkansas, and Louisiana, and in the Tidewater and Coastal Plains areas of North Carolina and Virginia, principally on the larger farms where some harvesting equipment was available. Smaller acreages of soybeans for hay and soil building in the Delta areas and decreases in idle land, hay, and corn in the North Carolina and Virginia areas accompanied the increase in the acreage of soybeans harvested for beans.

Soybeans fit well into farm organization in the Delta and North Carolina-Virginia areas, affording a supplemental use for small-grain machinery and competing only to a limited extent with cotton for labor during the harvesting season. Moderate increases above the 1942 acreage could be made in 1943 within the framework of the present programs and prices. Crushing facilities (cottonseed oil mills) are available in most areas. Shortages of combines for harvesting the beans are expected to be a limiting factor.

WITH average yields in 1943, cotton-seed production will likely be greater than in 1941 but considerably less than in 1942. One means of increasing the production of vegetable oils is to produce more cotton. However, in many areas the oil yields per acre are higher from peanuts or soybeans than from cotton. Moreover, the profitable production of cotton requires more nitrogenous fertilizers and labor than peanuts or soybeans. The situation is different with long-staple cotton in that more lint may be needed as well as more seed.

In recent years Mississippi and Arkansas have accounted for about two-thirds of the total production of long-staple Upland cotton (1⅛ inches and over). Acreage of this cotton could be increased in 1943 to 1.8 million acres, 15 percent more than in 1942. This acreage, with average yields, would produce more than 1.1 million bales. Most of the increase could be obtained by replacing part of the medium-length cotton in the delta areas and in South Carolina. Some further increase could be encouraged by additional shifts from short- to long-staple varieties. A reserve capacity roughly estimated at 750,000 acres is potentially available for long-staple Upland cotton within present allotments.

In the Southwest, production of American-Egyptian cotton in 1942 is about 80 percent above 1941. It could be increased slightly more in 1943.

SUGAR milling capacity will be the major factor limiting increases in sugar production in 1943. A 13-percent increase in sugarcane acreage with average yields would approximate milling capacity. A larger acreage could be obtained if farmers were compensated for the risks involved.

Tomato acreage in the South increased about 75 percent from 1941 to 1942. Over 134,000 acres could be grown next year, or 15 percent more than the 1942 acreage. If still more tomatoes are needed, farmers in Virginia and Arkansas alone could produce an additional 90,000 acres if they were given sufficient incentive. A major portion of this potential acreage is in Arkansas, but tires for trucks, additional canning facilities, more labor for the canneries, and better returns to growers would be essential.

For the South as a whole feed-grain acreage in 1942 increased considerably less than livestock numbers, and in the Southeast a net reduction in both feed-grain acreage and production has occurred. In the Southwest, favorable yields have provided generally ample feed supplies.

Some net shift in acreage from feed grains to soybeans and peanuts may be made in 1943. This means that to obtain increases in livestock production, farmers will need to take better care of their livestock; use more byproducts, such as cottonseed, soybean and peanut meal; purchase more feed; and salvage more waste from dug peanuts, from soybeans and from corn.

The reduced acreage of hay and forage this year has been more than offset by favorable yields and by increases in the production of peanut hay. In general, hay and forage production should be adequate to meet the needs in 1943 if yields and pasture conditions are normal.

MORE fluid milk is needed in the South to supply the increased military and civilian population in training and manufacturing centers. A moderate increase in milk production appears possible for 1943, though considerably less than the increase in 1942. Most of the increase for next year will result from milking more cows in the commercial milk areas. Obstacles to the attainment of increased milk production in 1943 include a possible shortage of rubber for trucks and of labor, and a prospective high cost of purchased feed.

The indicated production of pork in the South this year is 28 percent above 1941. The estimated 1943 production is about 10 percent greater than in 1942. This level of pork production is about as high as practicable without a drastic change in farming methods. Areas producing pork predominantly for home consumption will produce a reduced proportion of the total for the South in 1943. Large-scale production areas such as the Central Oklahoma Prairie, the West Texas Livestock and Wheat area, and South Georgia will account for most of the increase.

THE South probably will exceed the 1942 egg goal by 5 percent. This record egg production can be maintained in 1943, and further increased in some areas. A large proportion of the eggs produced are consumed on farms; but in a few areas such as the Shenandoah Valley areas of Virginia and West Virginia, most of Oklahoma, and central Texas, chickens for commercial egg production are important in the general farming systems. These areas generally have the greatest possibilities for increase in 1943 over 1941 because of surplus grain or favorable market outlets. The primary obstacles to increased egg production are marketing and processing problems.

The response to wartime demands is clearly bringing about a desirable development of livestock enterprises in some sections of the South where there are physical characteristics which limit opportunities for cash-crop production. In the more specialized cash-crop farming areas, where large amounts of "compliance" land have

been used rather ineffectively heretofore, the development of livestock enterprises is definitely making for better balanced and more profitable farming systems. This is especially true in the Black Belt in Alabama and Mississippi, the Texas Blackland, and the Mississippi Brown Loam, areas in which land deterioration under cash cropping has become increasingly serious.

In the sub-humid cotton and wheat areas of Texas and Oklahoma the expansion of livestock production, while desirable, is thought to be a temporary means of marketing surplus feed rather than a change likely to become permanent.

IN many of the Coastal Plains areas and old peanut areas in the Southwest, wartime farm adjustments are not in harmony with long-time desirable adjustments. The soils there are inherently poor and intensive production of peanuts will hasten soil deterioration unless more satisfactory production practices are developed. In the Southeast, pork production is expected to be stepped up considerably beyond the reasonable limits set by increased acreage of peanuts for grazing with hogs, or the capacity of the expanded acreage for gleanings. In some localities, grazing of peanuts supplemented by some grain feeding and better management is needed more than large increase in hog numbers.

Relatively little response to the wartime demand for farm products is being made in areas with poor physical resources and subsistence farming. In these areas agriculture has heretofore been based upon an extravagant and rather ineffective use of manpower. Although the expanded needs of other farming areas and of industry have drawn labor from these areas, there yet remains a substantial surplus in many localities.

—Kenneth L. Bachman.

SOYBEANS: Possibilities

In 1933 production of soybeans for beans was about 13 million bushels, in 1941 near 107 million, and September indications were for 211 million bushels this year. About 82 percent of the 1942 crop will be in Ohio, Indiana, Illinois, and Iowa. In the Corn Belt, where mostly oil varieties are grown, yields per acre are materially higher than elsewhere.

The yellow and green beans of the Corn Belt are preferred for crushing. Black and brown varieties, grown elsewhere, are considerably lower in oil content and also produce a dark-colored meal with less appeal to feeders. About 11 pounds of oil can be obtained from a bushel of high quality soybeans by the recently developed solvent process, which stepped up yields from former levels of about 9 pounds by the expeller process and 8 pounds by hydraulic presses.

Demand for soybean products has increased with technological advances and growing familiarity to users. About 75 percent of the factory consumption of soybean oil is for food products, made possible by development of processes to remove the bitter flavor of the oil. Soy flour, once used mostly in "health foods," now is used generally in bakery products. Soybean meal is constantly finding more favor with stock feeders, and industry has used more and more of it for plastics and glues.

Prospects are that soybean acreage in 1942 was about as large as is likely for the next few years. Further expansion would cut heavily into needed acreage of corn and other feed crops. Crushing facilities, difficult to expand because of wartime construction limitations, are not adequate to handle much greater crops.

Year and month	Industrial production (1935–39=100) [1]	Income of industrial workers (1935–39=100) [2]	Cost of living (1935–39=100) [3]	1910–14=100					
				Wholesale prices of all commodities [4]	Prices paid by farmers for commodities used in—			Prices paid, interest, and taxes	Farm wage rates
					Living	Production	Living and production		
1925	90	126	125	151	163	147	156	170	176
1926	96	131	126	146	162	146	155	168	179
1927	95	128	124	139	160	144	153	166	179
1928	99	127	123	141	160	148	155	168	179
1929	110	134	122	139	159	147	154	167	180
1930	91	110	119	126	150	141	146	160	167
1931	75	85	109	107	128	123	126	140	130
1932	58	59	98	95	108	109	108	122	96
1933	69	61	92	96	108	108	108	118	85
1934	75	76	96	109	122	123	122	128	95
1935	87	87	98	117	124	127	125	130	103
1936	103	100	99	118	123	125	124	128	111
1937	113	117	103	126	128	136	131	134	126
1938	89	91	101	115	122	125	123	127	125
1939	108	105	99	113	120	122	121	125	123
1940	123	119	100	115	121	124	122	126	126
1941	156	163	105	127	131	131	131	134	154
1941—September	161	177	108	134	136	135	136	138	----
October	163	178	109	135	140	138	139	141	165
November	166	180	110	135	142	139	141	143	----
December	167	187	110	137	143	141	142	143	----
1942—January	171	196	112	140	146	145	146	146	166
February	172	194	113	141	147	147	147	147	----
March	171	[5] 194	114	142	150	149	150	150	167
April	173	[5] 203	115	144	152	149	151	151	177
May	[5] 174	[5] 209	116	144	153	150	152	152	----
June	[5] 176	216	116	144	154	150	152	152	183
July	180	227	117	144	154	150	152	152	202
August	183	----	117	145	154	150	152	152	----
September	----	----	----	----	155	150	153	152	----

Year and month	Index of prices received by farmers (August 1909–July 1914=100)								Ratio prices received to prices paid, interest, and taxes
	Grains	Cotton and cottonseed	Fruits	Truck crops	Meat animals [5]	Dairy products	Chickens and eggs	All groups	
1925	157	177	172	153	141	153	163	156	92
1926	131	122	138	143	147	152	159	145	86
1927	128	128	144	121	140	155	144	139	84
1928	130	152	176	159	151	158	153	149	89
1929	120	144	141	149	156	157	162	146	87
1930	100	102	162	140	134	137	129	126	79
1931	63	63	98	117	92	108	100	87	62
1932	44	47	82	102	63	83	82	65	53
1933	62	64	74	105	60	82	75	70	59
1934	93	99	100	103	68	95	89	90	70
1935	103	101	91	125	117	108	117	108	83
1936	108	100	100	111	119	119	115	114	89
1937	126	95	122	123	132	124	111	121	90
1938	74	70	73	101	114	109	108	95	75
1939	72	73	77	105	110	104	94	92	74
1940	85	81	79	114	108	113	96	98	78
1941	96	113	92	144	144	131	122	122	91
1941—September	106	150	89	145	163	140	141	139	101
October	101	144	107	164	154	145	146	139	99
November	103	136	98	147	149	148	157	135	94
December	112	138	98	162	157	148	153	143	100
1942—January	119	143	102	204	164	148	147	149	102
February	121	150	98	161	173	147	135	145	99
March	122	151	111	136	180	144	130	146	97
April	120	158	118	158	190	142	131	150	99
May	120	159	131	152	189	143	134	152	100
June	116	153	148	169	191	141	137	151	99
July	115	155	131	200	193	144	145	154	101
August	115	151	126	256	200	151	156	163	107
September	119	156	129	191	195	156	166	163	107

[1] Federal Reserve Board, adjusted for seasonal variation. Revised September 1941.

[2] Adjusted for seasonal variation. Revised November 1941.

[3] Bureau of Labor Statistics.

[4] Bureau of Labor Statistics index with 1926=100, divided by its 1910–14 average of 68.5.

[5] Revised.

NOTE.—The index numbers of industrial production and of industrial workers' income shown above are not comparable in several respects. The production index includes only mining and manufacturing, the income index also includes transportation. The production index is based on volume only, whereas the income index is affected by wage rates as well as by time worked. There is usually a time lag between changes in volume of production and workers' income, since output can be increased or decreased to some extent without much change in the number of workers.

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